NEW NAMES AND COMBINATIONS IN COMPOSITAE, TRIBE ASTEREAE

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The following new names and combinations are being published with few comments at this time in order that they will be available for use in future publications. It was considered best to group them together to facilitate the work of those compiling lists of nomenclatural changes.

Aster subg. *Aster* sect. *Aster* subsect. *Biotia* (DC.) Semple stat. nov. Based on *Biotia* DC. Prod. 5: 264 1836. LECTOTYPE SPECIES: *Biotia schreberi* (Nees) Nees in DC. = *Aster schreberi* Nees.

Aster subg. *Aster* sect. *Dumosi* Torrey & A. Gray subsect. Heterophylli (Nees) Semple, stat. nov. Based on *Aster* sect. *Genuini* Nees (sp.-group) *Heterophylli* Nees. Gen. et Sp. Aster., 52. 1833. TYPE SPECIES: *Aster heterophyllus* Willd. = *Aster cordifolius* L.

Aster subg. *Aster* sect. *Dumosi* Torrey & A. Gray subsect. *Porteriani* (Rydb.) Semple, stat. nov. Based on *Aster* sp.-group *Porteriani* Rydb. Fl. Colorado, 352,353. 1906. TYPE SPECIES: *Aster porteri* A. Gray.

Aster subg. *Aster* sect. *Heleastrum* (DC.) A. Gray subsect. Chapmaniani Semple, subsect. nov.
Aster sunt perennis capitulescenti laxi paniculati x=7. TYPE SPECIES: *Aster chapmanii* Torrey & A. Gray. The subsection includes the only x=7 species of the section and is characterized by its long linear basal rosette leaves and its lax cymose-paniculate capitulescence.

Aster subg. *Aster* sect. *Heleastrum* (DC.) A. Gray subsect. Eryngiifolii (Alex. in Small) Semple, stat. nov. Based on *Aster* sp.-group *Eryngiifolii* Alex. in Small. Man. S.E Fl. 1365, 1370. 1933. TYPE SPECIES: *Aster eryngiifolius* Torrey & A. Gray.

Pityopsis sect. *Graminifoliae* (Small) Semple, stat. nov. Based on *Pityopsis* sp.-group *Graminifoliae* Small. Man. S.E. Fl. 1340. 1933. TYPE SPECIES: *Pityopsis graminifolia* (Michx.) Nutt.

Pityopsis graminifolia (Michx.) Nutt. var. *aequilifolia* Bowers & Semple, var. nov.
Folia caule sunt aquala non deminuta multum sursum.
TYPE: FLORIDA. Lake Co.: Tavares, sandy roadside on FL-19, S of old US-441, 20 September 1971, *Wofford & Bowers 71-558* (Holotype: TENN!). The varietal name was proposed by Bowers (1972) in his unpublished doctoral thesis, but in *Heterotheca microcephala* (Small) Shinners. Since we (Semple and Bowers 1985) agree that the proper position of the variety is within *P. graminifolia*, based on work reported by Semple et al. (1980), the combination is being presented as a joint effort. The alternative option would have been to publish the original combination as Bowers proposed and then base a new combination on it.

Pityopsis graminifolia (Michx.) Nutt. var. *tracyi* (Small) Semple, stat. et comb. nov. Based on *Chrysopsis tracyi* Small. Fl. S.E.U.S., 1182. 1903. TYPE: FLORIDA. Manatee Co.: Palma Sola, *Tracy 7713* (Holotype: NY!; isotypes: GH!, US!).

Solidago altissima L. var. *gilvocanescens* (Rydb.) Semple, comb. nov. Based on *Solidago canadensis* L. var. *gilvocanescens* Rydb. Contr. U.S. Natl. Herb. 3: 162 1895. The variety includes diploid and tetraploid cytotypes which are most similar to the hexaploids typical of var. *altissima* found in eastern North America (Semple et al. 1984).

Solidago nemoralis Aiton ssp. *decemflora* (DC.) Brammall, stat. et comb. nov. Based on *Solidago decemflora* DC. Prod. 5: 322. 1836. The combination was made by Brammall (1979) in his unpublished M.Sc. thesis.

Virgulaster Semple, gen. nov.
Phyllari sunt mucronati, florae radiate sunt pallidae caeruleae, x=13 et x=21.
TYPE SPECIES: *Virgulaster ascendens* (Lindl. in Hook.) Semple (syn: *Aster ascendens* Lindl. in Hook.). The new genus is proposed to be consistent with the treatment of *Virgulus* Raf. as a genus distinct from *Aster* L. Allen (1985) demonstrated that *Vr. ascendens* (under the synonym *Aster ascendens*) was of allopolypoid origin with *Aster occidentalis* Nutt. as the probable *x*=8 parent and *Virgulus falcatus* (Lindl. in Hook.) Reveal & Keener as the possible x=5 parent. If the two parental species are not treated as congeneric, then the alloploid evolutionary line should not be treated as just a part of either parental genus. If, however, the combination *Aster* subg. *Virgulus* (Raf.) A. Jones is accepted, then the following combination should be adopted: *Aster* subg. *Ascendentes* (Rydb.) Semple, based *Aster* sp.-group *Ascendentes* Rydb.

Fl. Colorado, 352, 354. 1906. TYPE SPECIES: *Aster ascendens* Lindl. in Hook. Rydberg (1906) spelled the species epithet "adscendens" which is an orthographic error, and therefore the "d" has been dropped from the group name based on it in the above combination.

Virgulaster ascendens (Lindl. in Hook.) Semple, comb. nov. Based on *Aster ascendens* Lindl. in Hook. Fl. Bor. Amer. 2: 8. 1834. TYPE: ALBERTA. Banks of the Saskatchewan, *Drummond s.n.* (K!).

Virgulaster bernardinus (Hall) Semple, comb. nov. Based on *Aster bernardinus* Hall. Univ. Calif. Publ. Bot. 3:79. 1907. TYPE: CALIFORNIA. San Bernardino Co.: San Bernardino Valley, *Parish 5543* (Holotype: UC; Isotypes: BM!, GH!, NY!).

Virgulus sect. *Virgulus* subsect. *Lasallea* (Greene) Semple comb. et stat. nov. Based on *Lasallea* Greene. Leafl. Bot. Obs. Crit. 1: 5. 1903. TYPE SPECIES: *Virgulus sericeus* (Vent.) Reveal & Keener (= *Aster sericeus* Vent.).

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